GEN3
PRECISION AS STANDARD

CUSTOMER CASE STUDY

Putting The MUST3 To The Test

GEN3 MUST3 Case Study

MUST3 KEY FEATURES

- Immediate pass/fail information on completion of each test
- 4 Individual globule blocks for wetting balance testing
- Automatic component alignment and testing
- Testing ability down to 0201 devices
- Step and repeat function for multi-leaded devices

CHALLENGE

We were contacted by a potential customer who had a unique component that they wanted to clarify was able to be solderability tested and would order a machine if we could get the required test results.

The variables of their component were solder alloy, solder temperature,
pre-heat time, angle of dipping and flux. In order for GEN3 to prove these samples worked, we had the customer ship us samples of the components where we undertook extensive testing.

RESULTS

To reduce the number of tests from a full factorial matrix we tested each variable. This resulted in 8 tests. At the start of the work, no f lux had been provided. We noticed that upon dipping there was effervescence from the side of the component and the globule was left in a distorted shape.

This atypical behaviour can be explained by the globule being poisoned and the melting behaviour altered. Material from the globule had entered the globule changing its behaviour. After the results of these tests, GEN3 had successfully proved that the components were able to be tested accurately to the customers requirements. The customer then placed an order with GEN3 for their own MUST solderability tester.

BENEFITS TO OUR CUSTOMER

In a mass soldering operation where there is more available solder these components will solder successfully. However, di culties with this work revealed how solderability testing can be used for more detailed studies investigating the construction and material set in the customer's components to further optimise their solderability.

WHY GEN3?

The latest technological evolution and the world's no. 1 solderability test system. Capable of measuring down to 0.001mN and performs solderability testing in accordance with all major international standards.